



Dehydration

General Information

Lack of water and exposure to sun and heat are big hazards to health in the plains. Water accounts for about one half to two thirds of an average person's weight, so it is important to keep yourself properly hydrated.

Symptoms

Signs and symptoms of dehydration include: headache, stomach ache, loss of appetite, sleepiness, nausea, dizziness, difficulty in breathing, tingling of the legs and arms caused by poor circulation, indistinct speech and finally, an inability to walk.

Still, 10% dehydration generally causes no permanent ill effects. When dehydration exceeds 10%, you will become delirious, spastic, almost deaf, and barely able to see. The skin shrivels and becomes numb. At temperatures above 90°F, dehydration over 15% is generally fatal. At 85°F and less, the body can stand up to 25% dehydration.

Preventative Measures

Dehydration is cured and prevented primarily by drinking water but other beverages such as energy drinks and juice will work too. Your body can only process a liter of water per hour, so it is important to drink small amounts regularly to keep your body adequately hydrated. Limiting your consumption of



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caffeinated beverages (coffee, tea, soda, etc.) is also important in preventing dehydration. Caffeine is a diuretic which causes your kidneys to excrete fluid at a more rapid rate. This can result in more frequent urination and as a result, an increase in the rate of fluid loss.

To avoid dehydration:

- Drink 8-16 ounces of water before beginning work.
- Take frequent drinks during each hour of work. Refer to Table 1 for guidance on the quantity of water that should be consumed each day.
- Drink as much as possible during meals.
- Continue replacing fluids throughout the evening.
- Limit drinks that contain caffeine and alcohol.

Table 1. Guidelines for water requirements at three levels of physical activity.

| Activity | Typical Duties | Quarts (liters) per day at temperatures: | |
|----------|------------------------------------|--|---------------|
| | | < 80°F (26°C) | > 80°F (26°C) |
| Light | Desk work, camp-related activities | 6 | 9 |
| Moderate | Hiking | 9 | 12 |
| Heavy | Strenuous work | 12 | 15 |